

PROJECT MANAGEMENT GUIDELINE

SECTION 4 - PROJECT EXECUTION AND CONTROL PHASE

Section 4: Execution and Control

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Section 4: Execution and Control

Introduction

Project Execution and Control Phase Overview

The Project Execution and Control Phase is the part of the project and product lifecycle where the tasks that build the deliverables are executed. The Project Execution and Control Phase begins when the project plan is approved and the resources necessary for executing the starting task are assembled. Project execution should be in accordance with the approved project plan. Figure 4.1 depicts the components of Commonwealth Project Management, as discussed in Section 1.

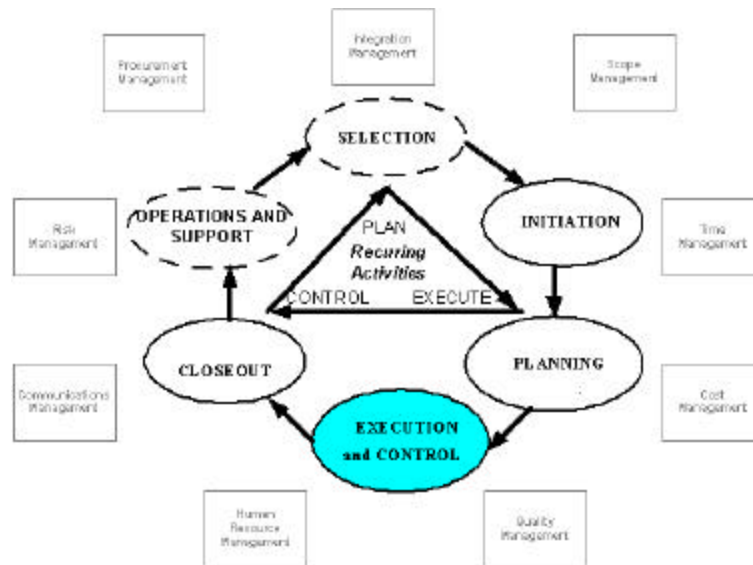


Figure 4.1
Project Management Knowledge Areas, Lifecycle, and Recurring Activities

Activities and Documents in the Execution and Control Phase

Project execution and control consist of task execution, measuring project progress, reporting project status, and exercising management controls. The project team executes the tasks as mapped out in the project plan. Controlling project execution requires the measurement of project performance, monitoring project risk, and controlling change to the project baseline. The manager is focused on observing and analyzing the work underway. Controls outlined in the project plan keep the project on schedule, in scope, and within budget. During this phase, the processes of executing, controlling, and planning are continuous interactive activities. Figure 4.2 depicts these activities. This phase ends when the product, good, or service developed has met the user acceptance criteria established in the performance plan and a user acceptance document has been completed. The essential deliverables created in this phase are project status reports and the user acceptance document.

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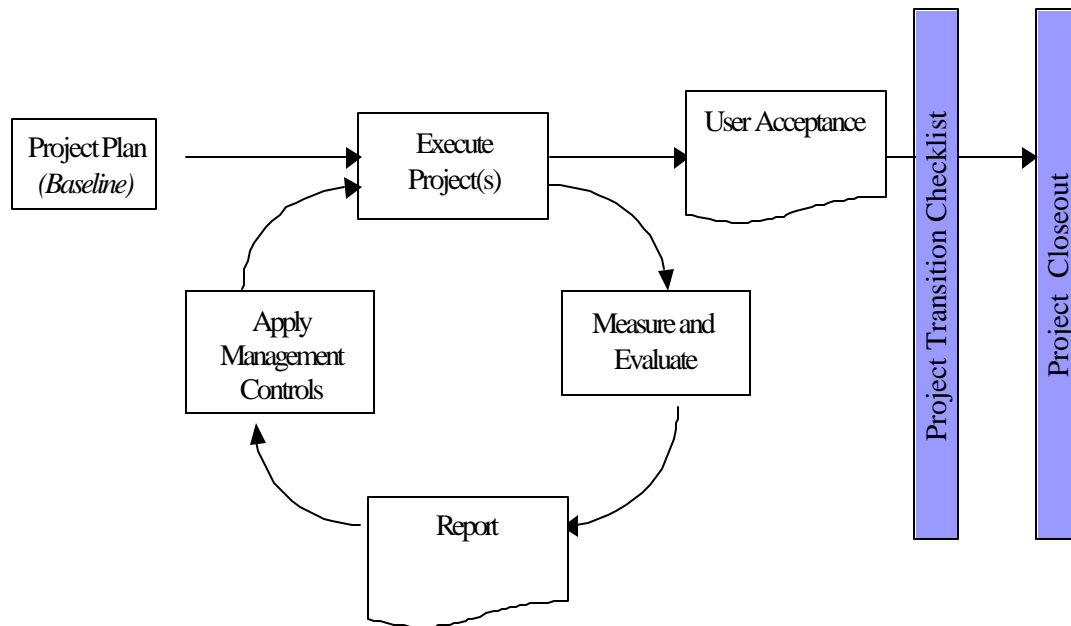


Figure 4.2
Project Execution and Control Phase Processes

Execution

Executing the Project

Execution is the act of carrying out planned activities. The execution of the project plan is simply the act of performing task and activities that result in the production of the project deliverables. Task and activities performed must be completed effectively and efficiently. The project plan serves as a road map and a common frame of reference for all members of the project team. The project plan is therefore, the foundation for successful delivery of projects. In a perfect world, plans are executed precisely as written. In reality, no plan is ever performed with such precision. Plans are forward looking documents that cannot anticipate all eventualities.

During execution, the project team must continuously monitor its performance in relation to the baselined project plan. By measuring and evaluating the actual execution of project activities against the baseline plan, the project team and stakeholders can gauge the progress of the project.

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Start Up

Moving from planning into execution can be a major obstacle in successful project delivery. A project kick off meeting can facilitate the transition from planning activities and tasks to executing them. A kick off meeting enhances execution by focusing the team on the project and by defining a starting point for beginning project execution. Additionally, it is a milestone when all resources needed to begin execution are assembled and available to the team.

The kick-off meeting provides an opportunity for communication and establishing the commitment of the team and stakeholders to the success of the project. The focus of the meeting is communications, identification of team members and stakeholders, reviewing the project scope and business objectives, identifying the challenges, and identifying the next step in getting the project underway. At this point, team members and team leads must, at a minimum, have copies of the schedule. The schedule must identify to each person his specific tasks and dates for starting and completing them.

Project Performance Monitoring

Performance monitoring can provide assurance that the project is progressing as planned or reveal the need to intervene and take action to ensure the achievement of the desired business objectives. The execution of project task and activities occur in a cycle where the task is executed, execution is measured, the results are reported, and management controls needed are applied. (See Figure 4.3.) Performance monitoring involves the collecting, analyzing, and reporting project performance information to provide the project team and stakeholders with information on the status of project execution. Measurements, or metrics, are used to monitor project progress and are based on information or data collected about the status of project activities or tasks.

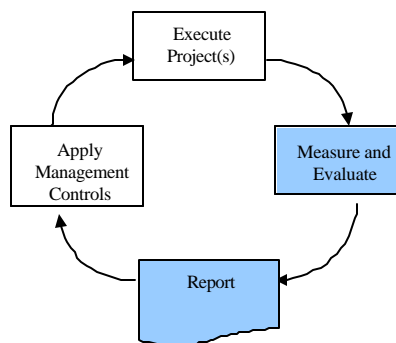


Figure 4.3
Project Monitoring Cycle

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Common Project Metrics

Various metrics can be gathered to monitor project progress. Common areas to monitor typically include project schedule, work effort, costs, issues resolution, and changes to the project. Other metrics may be requested and defined by project or organizational management. Some common metrics, which may be utilized during project execution, are provided below.

Project Schedule Deviation

Project schedules may include all tasks and estimated work hours for the entire project or it may represent a “phased” or “iterative” approach to the project. In the latter case, the schedule will reflect the tasks and efforts of only a portion of the entire project. Reporting for the purposes of management should be against the detailed portion of the project schedule. Monitoring the critical path is essential. By definition, the critical path of a project has little or no slack time. All schedule changes must therefore be analyzed for impact to the project’s critical path since such changes will result in deviation from the project schedule.

Monitoring of the planned versus actual starts and completions provides a gap analysis and leads to identification of overall trends. Status of tasks is reported as:

Not Started - 0 %
Started/In Process - 1-99 %
Completed - 100%

Metrics To Capture – For the reporting period and for plan to date:

- Number of “Planned Starts”
- Number of “Planned Completed”
- Number of “Actual Starts”
- Number of “Actual Completed”
- Number of tasks reporting > 84% completed
- Total number of project tasks
- Number and Percent of Milestones Tasks outstanding
(Total number of project milestones – Completed = Total Outstanding)
(Total outstanding / Total number of tasks = % Outstanding)

Work Effort

Monitoring work effort is essential for evaluating whether the project is executing within budget or not. This information is used to project the cost of labor for the project. The number of hours, preferably at the task level, needs to be captured and tracked.

Metrics To Capture – For the reporting period and for planned to date:

- Number of “Planned Hours”

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- Number of “Actual Hours”

Metric Calculations – For the reporting period and for planned to date:

- Deviation from plan
(Planned – Actual = Deviation from Planned Hours)
- Percent Deviation from plan
(Deviation from Plan/Planned Hours x 100 = % of Effort Deviation)

Cost - The budget plan developed during planning represents the basis for measurement of deviation during execution. Measuring cost requires the support of the financial and procurement support business units.

Metrics To Capture – Costs for the reporting period and for planned to date for:

- Internal Staff Labor
- Services
- Development Tools
- Software
- Hardware
- Materials and Supplies
- Facilities
- Telecommunications
- Training
- Contingency (Risk)

Metric Calculations – For the reporting period and for planned to date:

- Difference between actual expenditures and planned budget for each metric
- Increase or decrease to total project budget cost
- Percentage deviation from spending plan for the period measured
- $(\text{Spending Plan} - \text{Actual Cost}) / \text{Actual Cost} \times 100 = \% \text{ Deviation from Spending Plan}$

Project Issues - One indicator of project health is the number of open issues and their impact on the project. Proactive issue management aims to track and analyze all issues, specifically focusing on those that have remained unresolved.

Metrics To Capture – For the reporting period and for planned to date:

- Number of new issues
- Number of closed issues
- Number of outstanding issues

Metric Calculations – For the reporting period and for planned to date:

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- Total Number of issues = Number of outstanding issues + Number of closed issues
- Percentage of issues closed = issues closed divided by total issues

Project Change Requests - There will always be changes to a project. The challenge is to identify and manage them. The Change and Configuration Management Plan provide a process and guidance for managing change during project execution. A change management log and change request documents are used as tools to monitor, track, and approve request to change items under change control or configuration management.

Metrics To Capture – For the reporting period and for plan to date:

- Number of new requests by impact type, by requestor type
- Number of closed requests by impact type
- Number of outstanding requests by impact type
- Number of accepted change requests by impact type
- Number of rejected change requests by impact type
- Number of undecided change requests by impact type

Metric Calculations – For the reporting period and for plan to date:

- Total Number of requests by impact type =
Number of accepted requests by impact type + Number of rejected by impact type
+ Number of undecided requests by impact type – Number of new requests by
impact type
- Percent of high impact change requests =
Number of high impact requests / Total number of requests

Project Status Reporting

A standard requirement of all projects is to provide information to both executive management and the project team members on the status of the project. Although the frequency of the reports may sometimes vary, the frequency should correspond with information requirements identified in the project Communications Plan. Often status reports are prepared for executive or team meetings.

The project status report is a means of communicating regularly the ongoing progress and status of a project. The overall project status is communicated to all team members using the project status report. The same report may be used to communicate the project status to managers and other stakeholders. Key project team members generally produce the project team's status reports on a weekly, or biweekly, basis.

The information shared in the Status Report should be in a consistent format throughout the project (see the Status Report Template below as an example). The types of reports a particular

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project uses may vary in detail and metrics required but the basic format remains consistent across all projects. Major IT projects, under project oversight, will use the Commonwealth Major IT Project Status Report Dashboard for executive status reporting.

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Project Status Report Instructions and Templates

The Project Status Report is a means of communicating regularly the ongoing progress and status of a project. Normally Project Status Reports are prepared on a weekly or biweekly basis. The overall project status is communicated to all team members using the Project Status Report. The same report may be used to communicate the project status to managers and other stakeholders. (Major IT projects, under project oversight, will use the Commonwealth Major IT Project Status Report Dashboard for executive status reporting.)

A. General Information – Basic information that identifies the project.

Project Title – The proper name used to identify this project.

Project Working Title – The working name or acronym used to identify the project. If an acronym is used, define the specific meaning of each letter.

Proponent Secretary – The Secretary to whom the proponent agency is assigned or the Secretary that is sponsoring an enterprise project.

Proponent Agency – The agency that will be responsible for the management of the project.

Prepared by – The person(s) preparing this document.

Reporting Period – Enter the From and To dates in the format MM/DD/YY for the current reporting period.

B. Previous Period Activity Status - Provide a list of previous period activities. Activities should have clear links to the Work Breakdown Structure, Issue Resolution, Risk Mitigation, and Project Schedule. The previous period activity status can be extracted from the Current Period Activity Status reported in the last project status report. This information provides a review of past activity and provides context for the current period status.

C. Current Period Activity Status - Provide a list of current period activities. Activities should have clear links to the Work Breakdown Structure, Issue Resolution, Risk Mitigation, Project Schedule, and planned activities identified in the previous report. This information describes what activities were undertaken during the period just completed.

D. Significant Accomplishments for Current Period - Summarize any significant accomplishments of the project during the reporting period. Describe what was achieved from the activities undertaken during the past period.

E. Planned Activities for Next Period - Provide a list of the next reporting period activities. This is a review of what is in the Project Schedule.

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- F. Non-technical Project Issues** - List and describe non-technical project management issues that have been identified and are not resolved. Identify progress made toward resolution of the issues or actions required to resolve the issues. All issues are detailed in an Issue Management Document and recorded in an Issue Management Log.
- G. Technical Project Issues** - List and describe technical issues that have been identified and have not been resolved. Identify progress made toward resolution of the issues or actions required to resolve the issues. All issues are detailed in an Issue Management Document and recorded in the Issue Management Log.
- H. Action Items** - Report on actions assigned and executed to resolve project issues. Describe what the issue was, what action was taken, who was responsible, and what were the results.
- I. Risk Status** - Identify the Risk Status changes since the last status report. Risk Status changes includes changes in probability of occurrence or impact. List and describe any new risk event identified during the reporting period. The Risk Plan provides direction, identifies risk, mitigation plans, and assigns responsibility for routinely monitoring identified risk.
- J. Resource Usage** - Provide Man-Hours Expended and any other resources consumed in performance of activities or actions occurring in the past reporting period.

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Project Status Report

A. General Information

Provide basic information about the project including: Project Title – The proper name used to identify this project; Project Working Title – The working name or acronym that will be used for the project; Proponent Secretary – The Secretary to whom the proponent agency is assigned or the Secretary that is sponsoring an enterprise project; Proponent Agency – The agency that will be responsible for the management of the project; Prepared by – The person(s) preparing this document.

Project Title: _____ **Project Working Title:** _____

Proponent Secretary: _____ **Proponent Agency:** _____

Prepared by: _____

Reporting Period **From:** ____/____/____ **To:** ____/____/____

B. Previous Period Activity Status

Provide a list of Previous Reporting Period Activities and the status of each. Activities should have clear links to the Work Breakdown Structure, Issue Management, Risk Mitigation, Project Schedule, and the Current Period Activity Status of the last report.

C. Current Period Activity Status

Provide a list of Current Reporting Period Activities and the status of each. Activities should have clear links to the Work Breakdown Structure, Issue Management, Risk Mitigation, and Project Schedule.

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D. Significant Accomplishments for Current Period

Summarize any Significant Accomplishments during the Current Reporting Period.

E. Planned Activities for Next Period

Provide a list of Activities Planned for the next reporting period and the status of each. Activities should have clear links to the Work Breakdown Structure, Issue Management, Risk Mitigation, and Project Schedule.

F. Non-technical Project Issues

List and describe any Non-Technical Issues impacting the project at this point.

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G. Technical Project Issues

List and describe any Technical Issues impacting the project at this point.

H. Action Items

Identify all open Action Items and any Action Items closed during the reporting period.

I. Risk Status

*Identify any changes in Risk Status. Risk Status changes includes changes in probability of occurrence or impact.
List and describe any new risk event identified during the reporting period.*

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J. Resource Usage

Provide Man-Hours Expended and any other resources consumed in performance of activities or actions occurring in the current reporting period.

<i>Task or Issue Number</i>	<i>Activity or Task</i>	<i>Percentage Complete</i>	<i>Man-Hours Expended</i>	<i>Other Resources Consumed</i>

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Project Control

Control of the project is exercised through formal and informal processes exercised by the project manager, project team, and stakeholders. The process of conducting reviews and monitoring reports exerts a degree of control over the project. This discussion will, however, focus on the formal processes of control established by the project plan.

Project Plan

The centerpiece of project control documentation is the project plan. The project plan fixes the project schedule, tasks, and resources. The plan also establishes the procedures to manage quality, risk, communications, and change. Use of the plan to guide execution of project task exerts a great degree of control in the process of developing the deliverables. As mentioned previously, change is inevitable. Issues and unforeseen risk events must be addressed and resulting changes must be managed. Control over unplanned events is exerted through issue management and formal change management processes.

Issues Management Process

The purpose of the issue management process is to provide a mechanism for organizing, maintaining, and tracking the resolution of issues that cannot be resolved at the individual level. The approach consists of issue control mechanisms and a defined process that enables the project team to identify, address, and prioritize problems and issues.

The Issue Log and Issue Management Document are used to track, document, and resolve issues that are identified during project execution. Initially, issues may be identified in a project status report or in an Issue Management Document. The Issue Log is a master record of issues that are identified and is used to track progress toward resolution. The Issue Management Document is a means of reporting issues and is used by the project team to document the issue, assess the impact of the issue, make recommendations, and identify the resources needed to resolve the issues. Managers use the Issue Management Document to assign responsibility and to document decisions on actions directed to resolve the issue.

Issue Resolution Procedure - Issue management requires a process that begins with individuals submitting information on the issues to be considered. Any project team member, customer, stakeholder, or contractor can submit an issue. This must be done in writing, either in a Project Status Report or in an Issue Management Document. If the issue is identified in a Project Status Report, the person making the report prepares an Issue Management Document.

Issue management is divided into three phases. The first phase occurs when a person identifying an issue reports the issue and completes the first section of the Issue Management Document. The Issue Management Document provides a format to identify the issue, document the date the issue is submitted, and identify the person reporting the issue. It also requires the submitter to provide:

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- Date resolution is required
- A proposed assignee to resolve the issue
- An issue description
- An impact statement.

The identifier of the issue should attach any supporting documentation that will clarify the issue, such as reports, correspondence, test results, error messages, or other pertinent data. When completed the Issue Management Document is submitted to the project manager.

The project manager records the issue in the Issue Log and assigns a control number. The project manager must then assign someone to investigate the issue and develop a recommendation for resolving the issue. The issue resolution task is an action item reported in the project status reports. The project manager completes:

- Assignment of the action item to a responsible person
- Planned completion date
- Project Manager signature

The second phase of issue management is determining a resolution for the issue this corresponds to the second section of the Issue Management Document. The second section provides a format for identifying alternatives for resolving the issue and making recommendations on what actions should be taken. The person assigned to investigate alternatives and make a recommendation completes the following information:

- Discussion of alternatives
- Recommendation
- Estimate of additional resources
- Signature of person making the recommendation

The third and final phase is the management decision. The third section of the Issue Management Document is used to document these decisions. Management reviews the recommendation provided and decides to accept the recommendation made, modify the recommendation, reject the recommendations, defer a decision, or return the document for additional information. Management decisions can lead to change or configuration management actions, which are then handled through the change and configuration management process. When the issue or problem has been resolved and verified, the actual date the problem was resolved and an approval signature completes the issue resolution process, and the issue is closed in the Issue Log.

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Issue Management Instructions and Template

A. General Information – Basic information that identifies the project.

Project Title – The proper name used to identify this project.

Project Working Title – The working name or acronym used to identify the project. If an acronym is used, define the specific meaning of each letter.

Proponent Secretary – The Secretary to whom the proponent agency is assigned or the Secretary that is sponsoring an enterprise project.

Proponent Agency – The agency that will be responsible for the management of the project.

Prepared by - The person(s) preparing this document.

Date and Issue Number – The Date the document is initiated and the Issue Number from the Issue Log that the document is referencing

B. Issue Background - The initiator will identify the issue and provide relevant background information.

1. **Issue Type** - Identify the type of issue by marking the appropriate box and providing additional clarification as necessary. The initiator will also enter the date when the issue was identified and the date when a resolution of the issue is required, recommend the best person or organization to resolve the issue, and identify attachments (if any).
2. **Issued Description** - Specifically describe the issue.
3. **Potential Impact** - Describe the potential impact that the issue will have on the project product or service if it is not resolved.

C. Issue Assignment - In this section, the project manager assigns the issue as an action item.

Date Issue Identified - *Record the date that the issue was identified*

Date Resolution Required – *Record the date when the issue must be resolved*

Action Assigned To - *Record the who is assigned issue as an action*

Project Manager Signature – *Project Managers authenticate the assignment with their signature*

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D. Issue Resolution Alternatives and Recommendations - The person assigned action on the issue will complete this section.

- 1. *Issue Resolution Alternatives*** - Provide a written description of alternatives identified that could potentially resolve the issue.
- 2. *Recommendation*** - Provide a recommendation for resolving the issue and a rational for the recommendation. The recommendation may initiate a change management action or it may suggest other actions to resolve the issue outside of changes to the project plan or configuration items.
- 3. *Estimate of Additional Effort*** - Provide an estimate of additional resources required to resolve the issue.
- 4. *Signature of Person Making Recommendation*** – Authenticate recommendation by signing the document.

E. Management Action - The project manager or appropriate management team must review each issue and make a decision on what action should be taken. Check the appropriate box and provide written guidance as appropriate.

F. Approval Signature(s) - The person(s) making the decision(s) on the recommendation(s) expressed in Section D. will sign the issue management document. The signatures authenticate the decision, which is outlined in the Management Action, Section E.

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Issue Management Document

A. General Information

Provide basic information about the project including: Project Title – The proper name used to identify this project; Project Working Title – The working name or acronym that will be used for the project; Proponent Secretary – The Secretary to whom the proponent agency is assigned or the Secretary that is sponsoring an enterprise project; Proponent Agency – The agency that will be responsible for the management of the project; Prepared by – The person(s) preparing this document; Date/ Issue Number – The Date initiated and the Issue Number from Issue Log

Project Title: _____	Project Working Title: _____				
Proponent Secretary: _____	Proponent Agency: _____				
Prepared by: _____	<table border="1"> <tr> <td>Date and Issue Number</td> <td></td> </tr> <tr> <td>(From Issue Log):</td> <td></td> </tr> </table>	Date and Issue Number		(From Issue Log):	
Date and Issue Number					
(From Issue Log):					

B. Issue Background

The initiator identifies the issue and provides relevant background information.

1. Issue Type (check one):

<input type="checkbox"/> Technical (Specify)
Non-technical <input type="checkbox"/> Project Planning <input type="checkbox"/> Physical Resources <input type="checkbox"/> Funding Resources <input type="checkbox"/> Procedural <input type="checkbox"/> Personnel Resources <input type="checkbox"/> Other (Specify)

<i>Date Issue Identified</i>	
<i>Date Resolution Required</i>	
<i>Proposed Assignee</i>	
<i>Attachments (if any)</i>	<input type="checkbox"/> NO <input type="checkbox"/> YES (number) _____

2. Issue Description

--

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3. *Potential Impact (if not resolved)*

C. Issue Assignment

<i>Date Resolution Required</i>	
<i>Action Assigned To</i>	
<i>Project Manager Signature</i>	

D. Issue Resolution Alternatives and Recommendation

The person assigned the issue as an action completes this section.

1. *Issue Resolution Alternatives*

2. *Recommendation*

Provide recommendation(s) for resolving the issue and a rational for the recommendation(s).

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3. Estimate of Additional Effort

<i>Resources Required</i>	<i>Work Days/Costs</i>

4. Signature of Person Making Recommendation

<i>Name/Title</i>	<i>Signature</i>	<i>Date</i>

E. Management Action and Recommendation

The project manager or appropriate management team reviews the recommendation and makes a decision. Document management action below by checking the appropriate recommendation status.

☐ Approve

☐ Approve with the following changes:

☐ Defer

☐ Need Additional Information

☐ Disapprove

Recommended Action Assigned to:

Date Resolution Required:

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F. Approval Signatures

The signature(s) of the person(s) below authenticates the decision expressed in Management Action (Section E).

<i>Name/Title</i>	<i>Signature</i>	<i>Date</i>

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Issue Management Log Instructions and Template

The Issue Management Log records and tracks issues identified during project execution. The Issue Log and Issue Management document do not replace Change Control Request. Issue resolution may lead to a project or configuration change; however, resolution of many issues will not involve changes to the Project Plan.

General Information - Basic information that identifies the project.

Project Title – The proper name used to identify this project.

Project Working Title – The working name or acronym used to identify the project. If an acronym is used, define the specific meaning of each letter.

Proponent Secretary – The Secretary to whom the proponent agency is assigned or the Secretary that is sponsoring an enterprise project.

Proponent Agency – The agency that will be responsible for the management of the project.

Prepared by – The person(s) preparing this document.

Complete the columns in the table as described below.

Issue Number – Identify the issue with a sequential tracking number.

Issue Description – Provide a brief but specific description of the issue. (See Issue Management Document, Section B.)

Date Identified – Record the date the issue was identified. (See Issue Management Document, Section A.)

Assigned To – Record who is assigned to manage resolution of the issue identified. (See Issue Management Document, Section C.)

Date Resolution Required – Record when resolution of the issue must be completed. (See Issue Management Document, Section C.)

Resolution – When resolved, record the actual resolution of the issue.

Date Resolved – Record the actual date the issue is resolved.

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Issue Management Log

Provide basic information about the project including: *Project Title* – The proper name used to identify this project; *Project Working Title* – The working name or acronym that will be used for the project; *Proponent Secretary* – The Secretary to whom the proponent agency is assigned or the Secretary that is sponsoring an enterprise project; *Proponent Agency* – The agency that will be responsible for the management of the project; *Prepared by* – The person(s) preparing this document.

Project Title: _____

Project Working Title: _____

Proponent Secretary: _____

Proponent Agency: _____

Prepared by: _____

The Issue Management Log is used to record and track issues that are identified during Project Execution. The Issue Log and Issue Management documents do not replace Change Control Request. Complete the information requested in the columns below for each Issue Management Document submitted. Use one row for each issue. When an issue is resolved, document how and when in the last two columns.

<i>Issue Number</i>	<i>Issue Description</i>	<i>Date Identified</i>	<i>Assigned To</i>	<i>Date Resolution Required</i>	<i>Resolution</i>	<i>Date Resolved</i>

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Change and Configuration Management

Any change to the configuration of a deliverable or to the baseline elements of the project plan must be managed with deliberate precision. The Change and Configuration Management Plan establishes the processes used to manage and control change. Additionally, the specific items that will be controlled through the change and configuration management process are listed in the Change and Configuration Management Plan. Activities involved in change and configuration management include controlling changes to the scope and the schedule.

Scope Change Control - Uncontrolled expansion of the project scope often results in project failure. A scope change usually requires additional project funds, resources, and time. The approved Project Charter and Baselined Project Plan establish the scope of the project. A change in the project scope should be approved by the person(s) who issued the Charter or Approved the Project Plan. Often, small incremental change requests result in an unacceptable and unauthorized expansion of project scope. The project manager and team must monitor changes to the scope baseline and recognize when a formal scope change should be made. Formal change management procedures require the documentation and authentication (with the signatures of the approving authority) for any change made to the project scope.

Schedule Control - Schedule issues come from a variety of sources. Variation from the project schedule must be investigated and the cause determined as soon as possible. When the reason for a schedule problem is discovered, a plan must be developed to correct the problem, as quickly as possible, with the least impact to the project. Schedule control is typically managed at the project level by the project manager. However, if the projects critical path is impacted, or scheduled milestones in the charter and project plan change, formal change management procedures must be implemented. The amount of variance that can be tolerated in the project schedule adjustment, if any, is addressed in the project charter.

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Cost Control - Projects fail to control cost, or go over budget, for many reasons. Failure to control cost is often a result of incremental changes, unplanned risk mitigation, or inaccurate budget planning. The Project Management Body of Knowledge describes cost control as being concerned with the following:

- Influencing the factors that create changes to the Project Budget Estimate to ensure that the changes are beneficial
- Determining that the project budget estimates have changed
- Managing the actual changes when and as they occur

Cost control includes the following:

- Monitoring expenditures to detect variances from the project spend plan
- Executing the change control plan to prevent incorrect, inappropriate, or unauthorized changes from being made to the Project Budget
- Recording authorized changes accurately in the Project Budget Plan

Quality Control - Quality control involves monitoring project deliverables and performance goals to ensure that the project delivers the required results established in the project performance plan. Quality control is performed throughout project planning, execution, and closure. Project performance measures include both product results such as deliverables and management results such as cost and schedule performance. The Quality Management Plan proved guidance on quality management process and establishes quality management controls.

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Change Request Instructions and Template

A. General Information – Basic information that identifies the project.

Project Title – The proper name used to identify this project.

Project Working Title – The working name or acronym used to identify the project. If an acronym is used, define the specific meaning of each letter.

Proponent Secretary – The Secretary to whom the proponent agency is assigned or the Secretary that is sponsoring an enterprise project.

Proponent Agency – The agency that will be responsible for the management of the project.

Prepared by – the person(s) preparing this document.

Date/Control Number – The date the request is initiated and the change or configuration item control number assigned.

B. Change Request Information - The requester provides information concerning the requested change along with any supportive documentation.

1. **Proposed Change Description** - Describe the proposed change.
2. **Justification for Proposed Change** - Provide a justification for the proposed change.
3. **Impact of Not Implementing Proposed Change** - Explain the impact of not implementing the proposed change.
4. **Alternatives** - Identify other actions that may be taken as an alternative to making the proposed change.

C. Analysis of Change Request - The requester provides information concerning the requested change along with any supportive documentation.

1. **Proposed Change Description** - Describe the proposed change.
2. **Justification for Proposed Change** - Provide a justification for the proposed change.
3. **Impact of Not Implementing Proposed Change** - Explain the impact of not implementing the proposed change.
4. **Alternatives** - Identify other actions that may be taken as an alternative to making the proposed change.

D. Change Request Initial Review - A manager within the project organization completes this portion of the request. Typically, the project or program manager reviews the change request. The project manager, program manager, or other designated manager conducts initial review and makes recommendations before the request is submitted to an established change or configuration management review board. Results and recommendations based on the review are provided in this section.

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- E. Management Review** – The change or configuration management review board conducts a final review and decides to approve or disapprove the request. In the blocks provided, record and authenticate the decision.

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Change Control Request

A. General Information

Provide basic information about the project including: *Project Title* – The proper name used to identify this project; *Project Working Title* – The working name or acronym that will be used for the project; *Proponent Secretary* – The secretary to whom the proponent agency is assigned or the Secretary that is sponsoring an enterprise project; *Proponent Agency* – The agency that will be responsible for the management of the project; *Prepared by* – The person(s) preparing this document; *Date/Control Number* – The date the request is initiated and the change or configuration item control number assigned.

Project Title: _____ *Project Working Title:* _____

Proponent Secretary: _____ *Proponent Agency:* _____

Prepared by: _____ *Date/ Control Number:* _____

B. Change Request Information

The requester provides information concerning the requested change along with any supporting documentation

1. Proposed Change Description

2. Justification for Proposed Change

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3. *Impact of Not Implementing Proposed Change*

4. *Alternatives*

C. Analysis of Change Request

The change requester or designated individual provides an explanation of the impact that this change will have on the project.

1. *Describe Impact on Change or Configuration Item*

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2. Impact on Project Budget

3. Impact on Project Schedule

4. Impact on other Project Resources

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D. Change Request Initial Review

The Project Manager, Program Manager, or other designated Manager conducts an initial review and makes a recommendation(s) regarding the implementation of the request before it is proposed to an established Change or Configuration Management Review Body. Results and recommendations based on the review are provided in this section.

Review Date: _____ Reviewers Name: _____

Reviewer's Position (Project Relationship): _____

___ Approve for Implementation ___ Reject ___ Defer Until: _____

Rational for Recommendation:

E. Management Decision

The management conducts a final review and decides to approve or disapprove the request. In the blocks below record and authenticate the decision.

Approval or Disapproval and Special Instructions:

Change or Configuration Management Reviewing Body:

Name: _____ Position: _____ Signature: _____

Name: _____ Position: _____ Signature: _____

Name: _____ Position: _____ Signature: _____

Name: _____ Position: _____ Signature: _____

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User Acceptance

Acceptance criteria for project deliverables establishes in advance an agreed upon standard of performance or capability that the user will accept in a specific deliverable. The Performance Plan developed in the Project Planning Phase articulates the project deliverables and acceptance criteria. Acceptance criteria then become the fundamental guideline for the design team to build a solution that the user will find acceptable.

The execution phase ends when the user has agreed to accept the deliverable(s) in the state that they exist. The acceptance criterion is the standard that the user uses to judge if each deliverable is satisfactory. In some cases, the deliverable may not meet all acceptance criteria but, from an overall view, the deliverable will meet the requirements of the user. The user must authenticate acceptance of each deliverable. The user will also identify any issues that remain outstanding and the agreed to plan for resolution of any outstanding issues.

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User Acceptance Instructions and Template

A. General Information – Basic information that identifies the project.

Project Title – The proper name used to identify this project.

Project Working Title – The working name or acronym used to identify the project. If an acronym is used, define the specific meaning of each letter.

Proponent Secretary – The Secretary to whom the proponent agency is assigned or the Secretary that is sponsoring a particular enterprise project.

Proponent Agency – The agency that will be responsible for the management of the project.

Prepared by – The person(s) preparing this document.

Date Prepared – The date this document is initially prepared.

Date/Control Number – The date the report is finalized and the change or configuration item control number assigned.

B. Project Deliverables and Acceptance Criteria Validation - In the first column, list the Project Deliverables specified in the Project Performance Plan. List the user Acceptance Criteria for each Deliverable in the second column. Based on the user evaluation of the deliverable in the third column indicate, with a Yes or No, whether each acceptance criteria has been met.

C. Outstanding Issues and Resolution Plan - For each acceptance criteria that was not met provide a description of the outstanding issues and describe plans to resolve, the outstanding issues after project closeout.

D. Acceptance Signatures - The signatures signify that the deliverables described in the project plan and listed in B. above are acceptable to the user in their current configuration. The undersigned agree to the resolution plans for any outstanding issues as described in C above.

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User Acceptance Report

A. General Information

Provide basic information about the project including: *Project Title* – The proper name used to identify this project; *Project Working Title* – The working name or acronym that will be used for the project; *Proponent Secretary* –The Secretary to whom the proponent agency is assigned or the Secretary that is sponsoring an enterprise project; *Proponent Agency* – The agency that will be responsible for the management of the project; *Prepared by* – The person or persons preparing this document; *Date/Control Number* – The date the report is finalized and the change or configuration item control number assigned.

<i>Project Title:</i>		<i>Project Working Title:</i>	
<i>Proponent Secretary:</i>		<i>Proponent Agency:</i>	
<i>Prepared by:</i>		<i>Date/ Control Number:</i>	

B. Project Deliverables and Acceptance Criteria Validation

In the first column, list the Project Deliverables specified in the Project Performance Plan. List the user Acceptance Criteria for each Deliverable in the second column. In the third column, indicate the Results of User Evaluation of the deliverable by indicating with a Yes or No if each part of the acceptance criteria has been meet.

<i>Deliverable</i>	<i>Acceptance Criteria</i>	<i>Results of User Evaluation</i>

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C. Outstanding Issues and Resolution Plan

Provide a description of the outstanding issues related to the deliverable acceptance criteria. Describe any plans to resolve standing issues if they exist after project closeout.

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D. Acceptance Signatures

The signatures below signify that the deliverables described in the project plan and listed in Section above are acceptable to the user in their current configuration. The undersigned agree to the resolution plans for any outstanding issues as described in Section C above.

<i>Position/Title</i>	<i>Signature/Printed Name/Title</i>	<i>Date</i>
<i>User Representative</i>		
<i>Proponent Agency Head</i>		
<i>Project Sponsor (required)</i>		
<i>Project Manager (required)</i>		
<i>Business Partner (Contractor)</i>		

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Project Transition Checklist

The project transition checklist provides a vehicle to verify completion of a project phase before beginning the next phase. The transition checklist used at the end of the Execution and Control phase focuses on completion of project tasks, and verification that acceptance criteria have been met. Additionally, the transition checklist forces the project team and project stakeholders to formally address the transfer and acceptance of the deliverables and associated documentation.

Project Execution and Control Transition Checklist

Project Execution and Control Transition Checklist is a list of questions that indicates necessary actions have been accomplished prior to moving to the Project Closeout phase. The checklist provides a status column where the completion status of project elements is recorded (as one of the answers shown below).

- Y = Item has been addressed and is completed.
- N = Item has not been addressed, and needs to be to complete the process.
- N/A = Item has not been addressed and is not related to this project.

Comments or plans to complete items that have not been addressed are also documented on the checklist.

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Execution and Control Transition Checklist

Provide basic information about the project including: *Project Title* – The proper name used to identify this project; *Project Working Title* – The working name or acronym that will be used for the project; *Proponent Secretary* – The Secretary to whom the proponent agency is assigned or the Secretary that is sponsoring an enterprise project; *Proponent Agency* – The agency that will be responsible for the management of the project; *Prepared by* – The person(s) preparing this document; *Date/Control Number* – The date the checklist is finalized and the change or configuration item control number assigned.

Project Title: _____ **Project Working Title:** _____

Proponent Secretary: _____ **Proponent Agency:** _____

Prepared by: _____ **Date/ Control Number:** _____

Complete the Status and Comments column. In the Status column indicate: Yes, if the item has been addressed and completed; No, if item has not been addressed, or is incomplete; N/A, if the item is not applicable to this project. Provide comments or describe the plan to resolve the item in the last column.

	<i>Item</i>	<i>Status</i>	<i>Comments/ Plan to Resolve</i>
1	Have all activities, tasks, and subtask been completed as specified in the baseline project plan?		
1.1	If the answer to 1 is No, is there a plan to complete these tasks?		
1.2	If the answer to 1.1 is No, is there an impact on the project delivering the product, good, or service for which it was chartered?		
2	Have all issues raised during the course of the project been closed?		
2.1	If the answer to 2 is No, is there a plan to close out these issues?		
3	Has all documentation supporting the transfer of the project deliverables to operations been completed?		

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	<i>Item</i>	<i>Status</i>	<i>Comments/ Plan to Resolve</i>
4	Have planning and coordination meetings been held with operations to insure a smooth transition of responsibility?		
5	Has the project met or exceeded performance goals established in the project performance plan?		
5.1	If the answer to 5 is No, is there an impact on project deliverables?		
6	Have all deliverable tests been completed?		
6.1	Did the product deliverables meet the acceptance criteria established in the project plan?		
7	Has a user acceptance document been completed?		
7.1	Has the authorized user authority signed off on acceptance of the deliverables?		
7.2	Were there any conditions or exceptions identified in the user acceptance document?		
7.3	If the answer to 7.2 is Yes, is there a plan to satisfy the conditions or exceptions?		
7.4	If the answer to 7.3 is Yes, is there a need for additional resources or time to satisfy the user's conditions? If so, identify the needs in the comment column.		
8	Is a plan in place to conduct the project closeout task?		

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	<i>Item</i>	<i>Status</i>	<i>Comments/ Plan to Resolve</i>
8.1	Have the project closeout tasks been assigned?		
8.2	Has a date been established when the Project Closeout Report will be completed?		
9	Is there an expectation of administrative or logistics issues during project closeout?		

Signatures

The Signatures of the people below relay an understanding that the key elements within the Planning Phase section are complete and the project team is ready to transition to the Execution Phase.

<i>Position/Title</i>	<i>Name</i>	<i>Date</i>	<i>Phone Number</i>

Section 4: Project Execution and Control

Information Technology Project Execution

The major difference in the execution of an IT project, from a manager's perspective, is the iterative processes that information technology projects go through in their development, testing, implementation, and documentation cycles.

For example, the following definitions describe the System Development Life Cycle (SDLC) components of the Execution Phase. Development is the actual work performed in the information technology project. Testing is the actual test of the products or processes created within the Development Phase. Implementation involves putting the tested and approved products into an operational environment for use by the customer. Documentation includes the creation of written operations manuals, standards, systems outputs, and performance reports that document the requirements and use of the product. All of these components combined provide the basis for the SDLC within the Execution Phase of the Project Management Methodology.

Information Technology Project Control

In IT projects, control is vital for keeping projects within scope, cost, and schedule and to delivery of quality products, goods, and services. IT projects often deal with unknown or unproven technologies that are difficult to accurately baseline the scope, schedules, and costs during the Planning Phase.

Information Technology Scope Control

Scope control is extremely important within IT projects. Doing work that is outside or beyond the stated work, as called out in the original requirements, is considered “scope creep” or expansion of scope. Expansion of scope is much more subtle within IT projects because adding additional features (e.g., adding an extra icon or function to an application) does not appear to be as significant as adding something to another type of project (e.g., adding an extra mile of road to a highway construction project). Scope creep (unnoticed additions or changes to the project from the agreed upon requirements or specifications) is not budgeted or scheduled, which means that any small scope change could eventually have a large cost or schedule effect.

Information Technology Schedule Control

Schedule control is an important aspect of project management that is often overlooked during information technology projects. Information technology projects have dependencies that can influence product delivery dates and, ultimately, customer satisfaction. These factors and dependencies may include, but may not be limited to, the following:

- Availability of staff or resources.
- Delivery of equipment or software.

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- Unexpected events.
- Deliverables from other projects or personnel.

Large or complex IT projects often have several schedules being managed at a functional level. Having the “owners” of these schedules meet at regular intervals is of great benefit to the project. The Project Manager is responsible for integrating project schedules.

Information Technology Cost Control

Cost control is an area where the unpredictability of technology can wreak havoc on the project plan. The cost of IT projects can change at an alarming rate. Maturity of the technology, length, and complexity of a project has a direct correlation to the probability that the project will exceed the budgeted expenditures. A Project Manager must constantly monitor the actual expenditures for labor and resources against the baselines in the project plan and make adjustments as appropriate to realign the plan and control cost. A change to the budgeted baseline may be required and the project manager will have to request a change from the management authority established in the project charter. In some cases, the change may be so significant that a reevaluation of the investment decision may become necessary.

Information Technology Quality Control

Instituting quality control within a project is a very important variable. Customers have high expectations for the availability and reliability of the IT systems they use. Setting up quality control audits and management processes that are carried out continually during the development and testing phases of an IT project are critical to successful delivery. Testing by the developers and by independent teams is also crucial to the delivery of quality systems. Test plans must be developed and results must be documented. The project performance goals and deliverable acceptance criteria represent the standard that must be achieved.

Information Technology Risk Control

Risk is an area that often sets IT projects apart from other projects. While all projects involve a degree of risk, it is the use and expense of new or unknown technologies that provide the greatest risk to the IT project. Techniques such as risk avoidance or mitigation may even compound itself in other areas, such as cost and schedule.

Developing and constantly updating risk plans is key to controlling risk. Having plans and procedures in place to control risk events when they occur is critical to delivering projects on time and within scope. There is no silver bullet for risk management on IT projects. Project Managers must devote themselves to identifying, planning for, and dealing with risk on a daily basis.

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Information Technology Configuration Management

Configuration management is the process for managing different variables that are a part of IT projects. Management of the variables includes, but may not necessarily be limited to, the following:

- Requirements.
- Specifications.
- Version control.
- Technical modifications.
- Contract modification.

Configuration control requires a process that is a part of the project team culture. Information technology projects, by nature, have many more traceable items than non-IT projects and the process must be enforced by the Project Manager.